

Apparently, the Examiner has come to this conclusion by simply extending the line that passes through O' and that is parallel to the base of the fastener at a height H2 across the stem to the bottom of the "V" between the heads (see FIG. 4B above). In other words, the Examiner has equated H2 with a height of the lowermost extent of the well. This is improper because there is no disclosure in Akeno that places the "V" in the location suggested by the Examiner. As the Examiner is aware, a rejection based on relative measurements taken from the figures is improper absent some indication that the drawings are to scale. Akeno provides no such indication, nor does he provide any indication of the location of the well with respect to the location of other features of the fastener element such as O'. In fact, the only disclosure in Akeno regarding the "V" between the heads is found at column 10, line 62 through column 11 line 6. Here Akeno states that it can be located in a desired position.

The Court of Appeals for the Federal Circuit has dealt with a similar situation in *Hockerson-Halberstadt, Inc. v. Avia Group Int'l, Inc.*¹ In *Hockerson*, the issue was whether patent drawings disclosed a groove and fins in a shoe sole, with the width of the groove being "less than the combined width of the fins."² The Appellant in *Hockerson* argued that the figures depicted a groove that is wider than the fins, but the Court found that, because the patent did not indicate that the drawings were drawn to scale, the Appellant's argument rested on "an inference drawn from certain figures about the quantitative relationship between the respective widths of the groove and fins."³ The Court held that "[u]nder our precedent...it is well established that patent drawings do not define the precise proportions of the elements and may not be relied on to show particular sizes if the specification is completely silent on the issue."⁴

Under the same legal precedent on which the Court relied in deciding *Hockerson*, the figures of the Akeno patent cannot be relied upon to show particular ratios with respect to any ratio or measurement that requires the height or location of the bottom of the "V" in Akeno.

Additional support for Applicant's position can be found in *Olson*,⁵ where the Appellant challenged the decision of the Board of Patent Appeals and Interferences sustaining a rejection of claims amended during prosecution. In *Olson*, the Appellant amended his claims to include a

¹ 222 F.3d 951 (Fed. Cir. 2000).

² 222 F.3d at 954-56.

³ *Id.*

⁴ *Id.*

⁵ 212 F.2d 590 (CCPA 1954)

limitation regarding the relative spacing between certain elements in the claimed invention.⁶ The claims were rejected on the ground that the spacing limitation was not supported by the original disclosure.⁷ The Appellant argued that the original drawings disclosed the claimed spacing proportions.⁸ In rejecting this argument the Court held, “[i]t is well known that Patent Office Drawings are not normally drawn to scale, with the dimensions and sizes of parts shown to exact measurements as are shop drawings.”⁹

As Akeno does not disclose all features recited in claim 1, Applicant respectfully submits that claim 1, and all claims that depend therefrom, are novel over Akeno.

Claim 27 requires, in pertinent part, a ratio of an overall height (J) of at least one of the heads to a height of a lowermost extent of the well (G) that is greater than 0.7 (i.e., $J/G > 0.7$). Here, too, the Examiner’s conclusion of anticipation by Akeno is based on improper scaling of patent drawings to ascertain the location of the bottom of the “V” of Akeno. Applicant respectfully submits that claim 27, and all claims that depend therefrom, are novel over Akeno.

Claim 48 requires, in pertinent part, a ratio of an overall length (L) of the fastener element to a height of a lowermost extent of the well (G) that is greater than 2.5 (i.e., $L/G > 2.5$). Again, the Examiner’s conclusion is based solely on improper scaling of patent drawings in contradiction of established case law. Applicant respectfully submits that claim 48, and all claims that depend therefrom, are novel over Akeno.

Claim 61 requires, in pertinent part, that each fastener element have a mold release factor, that is less than 0.1 (i.e., $MRF < 0.1$). Again, the Examiner has inferred undisclosed information from the drawings. Since the location of the bottom of Akeno’s “V” is indeterminate, it is not possible to find the maximum solid length from Akeno’s disclosure. Thus, it is simply not possible to calculate a MRF for Akeno’s fastener elements from the information contained in the Akeno reference. Applicant respectfully submits that claim 61, and all claims that depend therefrom, are novel over Akeno.

Claims 5, 14, 24, 30, 45, 50, 60 and 64 have been rejected as being obvious over Akeno. Applicant respectfully traverses this rejection.

⁶ 212 F.2d at 592.

⁷ *Id.*

⁸ *Id.*

⁹ *Id.*

The list of claims rejected as obvious suggests that this rejection is based upon the improper finding that Akeno fairly discloses all of the features of the base claims discussed above. Thus, a proper review of what Akeno can be fairly said to disclose may itself convince the Examiner of the non-obviousness of these dependent claims. Nevertheless, Applicant submits the following additional comments on the non-obviousness of the rejected claims.

Claims 5, 14 and 24 each depend from claim 1. Applicant has discovered that a G/A ratio of less than 0.6 provides fastener elements that are easier to de-mold from cavities of mold rolls, providing for improved manufacturability at a reduced cost. At the same time, Applicant has also found that fastener elements having such ratios provide for improved fastening performance when mating with, e.g., low loft loops, and also provide for enhanced product cycle life. For example, Applicant has found that each head of the fastener elements of claim 1 can demold without being substantially impeded by its neighboring head, which allows for each fastener element to return substantially to its nominal shape after demolding. Applicant has also found that when a load is applied to the fastener elements of claim 1 (such as by an engaged loop), the crook of each fastener element can bend open to release the loop without impeding the action of the neighboring crook. Akeno does not disclose or even suggest such a low ratio of G/A , nor does he hint at Applicant's solution. Rather, Akeno appears to overcome demolding difficulties by molding preforms with upwardly extending 'ears' that must be deformed in a secondary operation to form loop-engageable heads. Thus, there is nothing in the teaching of Akeno that would have led someone of ordinary skill in this art away from Akeno's own solution to this problem, and toward Applicant's claimed invention. Applicant respectfully submits that claims 5, 14 and 24 are each non-obvious over Akeno for at least the reason that they depend from a non-obvious base claim, and requests withdrawal of the rejection.

Claims 30 and 45 each depend from claim 27; and claims 50 and 60 each depend from claim 48. Applicant submits that the ratios J/G (overall height of the head to well height) greater than 0.7 (as specified by claim 27) and L/G (overall length of the fastener element to well height) greater than 2.5 (as specified by claim 48) are also not arbitrary, but in combination with features of respective base claims, can provide an improved fastener element. Akeno does not disclose or even suggest the claimed J/G or L/G ratios of claims 27 and 48, respectively, nor provides any guidance to one of ordinary skill that would have led to Applicant's invention. Applicant

respectfully submits that claims 30 and 45 are each non-obvious over Akeno for at least the reason that they depend from a non-obvious base claim, as are claims 50 and 60. Applicant respectfully requests withdrawal of the rejection.

Claim 64 depends from claim 61. Applicant discloses at page 14, lines 25-28 that “maintaining a low mold release factor, such as below 0.1, helps removing the molded fastener elements” and it also helps “prevent mold fouling and wear and decreases permanent distention of the hook heads.” Akeno does not disclose or even suggest a mold release factor less than 0.1. Furthermore, there is no indication in Akeno that such a mold release factor helps in removing the molded fastener elements from cavities of mold rolls, e.g., to prevent mold fouling and wear, and decrease permanent distention of the hook heads. Applicant respectfully submits that claim 64 is non-obvious over Akeno for at least the reason that they depend from a non-obvious base claim. Applicant respectfully requests withdrawal of the rejection.

Claims 24, 45 and 60 have been rejected as being obvious over Akeno in view of Romanko, U.S. Patent No. 6,484,371 (“Romanko”). Claim 24 depends from claim 1; claim 45 depends from claim 27; and claim 60 depends from claim 48. The limitations of claims 1, 27 and 48 have been discussed above. Romanko generally describes a method of making discrete, spaced apart hooks by profile extruding hook-shaped rails, cutting the hook-shaped rails, and then stretching the cut rails to form discrete, spaced apart hooks. Romanko’s fastener elements do not even have “V” shaped cutout between the heads. Thus, claims 24, 45 and 60 are non-obvious for at least the reason that Romanko fails to provide the elements of the base claim missing from Akeno, and Applicant respectfully requests withdrawal of the rejection.

Claims 10 and 35 have been rejected as being obvious over Akeno in view of Takizawa, U.S. Patent No. 5,537,720 (“Takizawa”). Claim 10 depends from claim 1; and claim 35 depends from claim 27, both of which have been described above. Takizawa does not disclose or even suggest a height of a lowermost extent of the well (G) that is less than 60 percent of an overall height (A) of the fastener element, as claim 1 requires, nor does he disclose or suggest a ratio of an overall height (J) of at least one of the heads to a height of a lowermost extent of the well (G) that is greater than 0.7, as claim 27 requires. In fact, Takizawa does not disclose even a single dimension for his fastener elements. Rather, Takizawa appears to be cited principally as disclosing fastener elements having tips extending toward the base. Applicant respectfully

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Page : 9 of 9

Attorney Docket No.: 05918-340001 / VGCP No. 6020

submit that claims 10 and 35 are non-obvious over the combination of Akeno and Takizawa for at least the reason that they depend from a non-obvious base claim, and respectfully requests withdrawal of the rejection.

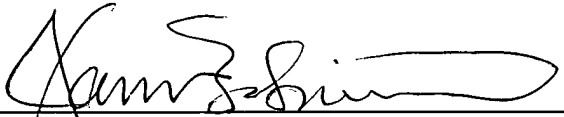
CONCLUSION

Applicant submits that all of the above claim rejections stem from an improper scaling of the drawings of Akeno and/or improper inferences about the location of the bottom of the "V" of Akeno's sketched fastener element. Applicant submits that this is clearly improper in view of established case law, and requests withdrawal of all rejections and a Notice of Allowance.

It is not believed that any fees are due, but please apply any charges or credits to deposit account 06-1050, referencing Attorney Docket No. 05918-340001.

Respectfully submitted,

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